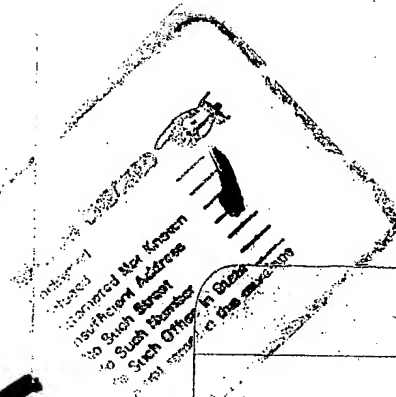


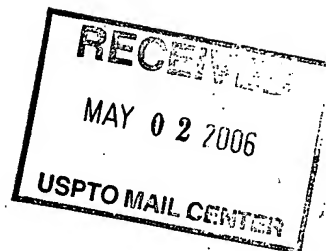
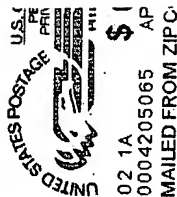
# KNOX

OFFICIAL BUSINESS

# AN EQUAL OPPORTUNITY EMPLOYER



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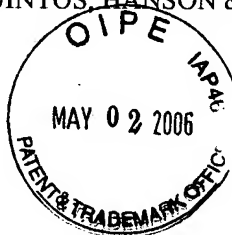
# UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,280	01/27/2005	Takako Araki	050042	7575

23850 7590 04/06/2006

ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP  
1725 K STREET, NW  
SUITE 1000  
WASHINGTON, DC 20006



EXAMINER

NGUYEN, LINH THI

ART UNIT PAPER NUMBER

2627

DATE MAILED: 04/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/520,280

Applicant(s)

ARAKI, TAKAKO

Examiner

Linh T. Nguyen

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 are rejected under 35 U.S.C. 102(b) as being unpatentable by Nanba et al (US Patent number 5796704).

In regards to claim 1, Nanba et al discloses a disk playback device (Fig. 3A-B) capable of reproducing signals (Fig. 3A, element 68) from a disk by irradiating the disk with a laser beam from an optical head (Fig. 3A element 12), the disk playback device comprising a laser drive circuit (Fig. 3A, element 64) capable of feeding a drive signal to the optical head (Fig. 3A element 64 connected to element 12 of the laser diode 22) and adjusting a power of the laser beam irradiated (Fig. 3B, element 38) by the optical head and a control circuit for controlling operation of the laser drive circuit (Fig. 3A-B, element 38 is connected to 64 laser driving circuit), wherein the control circuit comprises reproduction power optimizing means (Fig. 3B, element 74) for repeatedly optimizing the power of the laser beam for signal reproduction (Column 7, lines 30-33), and the reproduction power optimizing means comprises: evaluation data detecting (activation control element) means for detecting evaluation data representing quality of a signal reproduction state (Fig. 4, signals E1, E2, E3, and E5, are inputted in element 78 to compare with a predetermined value, therefore, evaluating the signals for quality

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(Column 8 lines 1-20)); retrieving means for retrieving one boundary value (Fig. 6, point 108) of two boundary values (Fig. 6, point 112) of a reproduction power wherein the evaluation data is a prescribed value ( $W_c$ ) or in the vicinity of the prescribed value (Fig. 5 and Fig. 6); and optimum reproduction power calculating means (Fig. 4, element 85) for calculating an optimum reproduction power based on the one boundary value retrieved (based on  $\Delta W$  the boundary value would be retrieved according to Fig. 5 and Fig. 6), wherein the retrieving means retrieves a new boundary value based on a boundary value obtained by a previous optimizing processing (Fig. 8, boundary value  $W$  in step S6 is used to calculate the next optimum value because the step is return to the S1).

In regards to claim 2, Nanba et al discloses a disk playback device according to claim 1, wherein the retrieving means retrieves a lower boundary value having a smaller value from the two boundary values (Fig. 8, S4), and the optimum reproduction power calculating means adds a predetermined value to the lower boundary value to thereby determine the optimum reproduction power (Fig. 8, S5).

In regards to claims 1/3 and 2/3, Nanba et al discloses a disk playback device, wherein the evaluation data is a frequency of occurrence of bit errors included in a reproduced signal (Fig. 10).

In regards to claims 1/4 and 2/4, Nanba et al discloses a disk playback device,

wherein the disk playback device comprises temperature detecting means (Fig. 4, element 84) for detecting a temperature of the disk, and the reproduction power optimizing means optimizes the reproduction power whenever the temperature of the disk varies by a predetermined temperature (Fig. 7, S9-10).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linh T. Nguyen whose telephone number is 571-272-5513. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, A. Wellington can be reached on 571-272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LN  
March 28, 2006

  
ANDREA WELLINGTON  
SUPERVISORY PATENT EXAMINER

<b>Notice of References Cited</b>	Application/Control No. 10/520,280		Applicant(s)/Patent Under Reexamination ARAKI, TAKAKO	
	Examiner Linh T. Nguyen		Art Unit 2627	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-5,796,704	08-1998	Nanba et al.	369/53.12
*	B	US-6,392,970	05-2002	Fuji et al.	369/47.5
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
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	P					
	Q					
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	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

10/520280

DT05 Rec'd PCT/PTO 27 JAN 2005

<b>INFORMATION DISCLOSURE STATEMENT PTO-1449</b>	Atty. Docket No. 050042	Serial No. New Application
	Applicant(s): Takako ARAKI	
	Filing Date: January 27, 2005	Group Art Unit: Not Yet Assigned

**U.S. PATENT DOCUMENTS**

Examiner Initial	Document No.	Name	Date	Class	Subclass	Filing Date (If appropriate)
<i>LN</i>	AA	5,796,704	Y. Nanba, et al.	08/18/98		
<i>LN</i>	AB	6,392,970	H. Fuji, et al.	05/21/02		
	AC					
	AD					

**FOREIGN PATENT DOCUMENTS**

	Document No.	Date	Country	Translation (Yes or No)	
<i>LN</i>	AE	8-221760	08/30/96	Japan	No-Cited in the International Search Report
<i>LN</i>	AF	11-53781	02/26/99	Japan	No-Cited in the International Search Report
<i>LN</i>	AG	0 905 685 A1	03/31/99	EP	
<i>LN</i>	AH	11-149641	06/02/99	Japan	No-Corresponds to EP 0 905 685 A1
	AI				

**OTHER DOCUMENTS**

	AJ	
	AK	
Examiner <i>[Signature]</i>	Date Considered	3/29/06